

# FREN - Fair Participation Layered Multi-Chain Time Cryptocurrency Protocol

## Token Contract on BSC

0xE6A768464B042a6d029394dB1fdeF360Cb60bbEb

## General

### Mission:

At FREN Crypto, our mission is twofold. Firstly, we aim to create a cryptocurrency protocol that enables fair participation and value support based on time. Through our innovative approach, we seek to ensure that early investors' interests are protected, while maintaining the long-term stability of the protocol. Secondly, we strive to foster a vibrant community of like-minded individuals who come together as friends. Our goal is to create an inclusive ecosystem where collaboration and shared vision are at the core of our interactions.

### Vision:

We envision a future where FREN Crypto revolutionizes the crypto landscape by introducing a groundbreaking concept of time-based value support. Our vision extends beyond financial innovation; it encompasses the cultivation of meaningful connections within our community. Transparency, fairness, and trust are the pillars that underpin our approach. By fostering an environment where everyone is treated as a friend, we aim to build a strong network of individuals united in their pursuit of a more equitable and prosperous future.

## Why FREN?

FREN emerged from the foundations of XEN, an incredibly innovative cryptocurrency issuance protocol known for its fair and decentralized nature. Inspired by XEN's design principles, FREN has built upon its predecessor's strengths while addressing several key shortcomings. Through in-depth research and analysis of XEN's economic and multi-chain models, we have identified crucial flaws that necessitated the creation of FREN.

Firstly, we recognized concerns with XEN's economic model. The rapid inflation and lack of robust value support posed significant challenges. To overcome these issues, FREN has implemented a more sustainable and balanced economic framework that ensures controlled

inflation and meaningful value backing. We prioritize stability and long-term viability to foster trust and confidence within the FREN ecosystem.

Furthermore, we examined XEN's multi-chain model, which employed a parallel deployment strategy, resulting in various complications and further dilution of value consensus. In response, FREN has developed a layered multi-chain architecture that maintains the core value consensus on the FREN chain while enabling seamless interoperability with different blockchain networks. This approach ensures efficient cross-chain interactions and maximizes the overall value of FREN.

By addressing these critical flaws, FREN aims to provide a superior alternative to XEN, one that offers a more sustainable economic model and a multi-chain design that preserves and enhances value consensus. Our commitment to innovation, fairness, and value support sets FREN apart as a robust and forward-thinking cryptocurrency protocol.

FREN introduces the concept of a Time Bank, which not only safeguards the interests of existing users but also ensures that newly issued tokens gain value linearly over time. By implementing this innovative design, FREN establishes a controlled inflation rate that maintains a healthy balance between supply and demand.

The Time Bank mechanism allows users to store their tokens and earn value based on the duration of their holdings. This approach incentivizes long-term participation and discourages excessive speculation, fostering a more sustainable ecosystem. By rewarding users for their commitment and contribution, FREN cultivates a strong and dedicated community.

Furthermore, FREN employs a stringent control mechanism to regulate the inflation rate. This ensures that the token supply remains stable and aligns with the long-term vision of the protocol. By striking a careful balance between controlled inflation and value preservation, FREN aims to create a reliable and resilient cryptocurrency that provides sustainable value growth for its users.

With the introduction of the Time Bank design and a strict inflation control mechanism, FREN demonstrates its commitment to creating a fair and sustainable ecosystem. Join us on this journey as we redefine the possibilities of decentralized finance and empower users with a crypto protocol that truly puts their interests at the forefront.

## Key Features

### Time Bank

By introducing a linked exchange rate design for the base currency, FREN has developed the Time Bank system, where the cost of newly issued tokens increases linearly over time in hourly

increments. This innovative approach ensures a controlled and predictable inflation rate while preserving the value of the token.

The Time Bank system operates on the principle that the cost of issuing additional tokens is directly linked to the passage of time. As time progresses, the cost of minting new tokens gradually increases, incentivizing users to hold their tokens for longer periods. This design encourages long-term participation, discourages short-term speculation, and fosters a more stable and sustainable ecosystem.

Through the Time Bank system, FREN promotes the concept of time as a valuable asset. Users are rewarded for their commitment to the protocol, as the value of their holdings increases over time. This unique mechanism enhances the intrinsic value of FREN tokens and encourages a long-term perspective among participants.

By implementing the Time Bank system and linking the cost of issuing tokens to time, FREN creates a sustainable model that promotes value growth and stability. Join us on this groundbreaking journey as we revolutionize the concept of time-based value in the world of decentralized finance.

$$\text{CurrentMintCost} = \text{startCost} * 2^{\text{yearLast}-1} + \text{startCost} * 2^{\text{yearLast}-1} * \text{hoursPast} / \text{hoursInYear}$$

## Control Inflation

### Mint Reward

FREN employs two methods to control the inflation rate effectively. Firstly, it eliminates the amplification factor for minting rewards, ensuring that the issuance of new tokens is solely regulated through logarithmic control. This approach allows for a more controlled and predictable increase in token supply.

By removing the amplification factor, FREN mitigates the risk of excessive token generation and maintains a steady inflation rate. This method ensures that the token issuance remains in line with the long-term vision and sustainability goals of the protocol.

Secondly, FREN implements a logarithmic control mechanism for the issuance of new tokens. This logarithmic curve governs the rate at which new tokens are minted, providing a gradual and predictable increase over time. This approach ensures that the inflation rate remains balanced and manageable, avoiding sudden surges or drastic fluctuations in token supply.

Through these dual measures, FREN maintains a controlled inflation rate that aligns with the protocol's objectives. By carefully managing the issuance of new tokens, FREN aims to create a stable and sustainable ecosystem that supports the long-term value growth and utility of its native cryptocurrency.

$$MintReward = \log_2^{GlobalRank - MintRank} * Term * (1 + EAA)$$

## Dynamic APR Stake

In addition, FREN introduces new contract parameter designs that include average minting days, average staking days, and average staking amounts. Through these new parameters, FREN modifies the fixed Annual Percentage Rate (APR) for staking rewards to a dynamic APR based on time, number of stakers, and staking amounts. This adjustment allows for better control of staking rewards and overall inflation rate.

The average minting days parameter reflects the average duration for token minting, ensuring that the rate at which new tokens are minted aligns with the desired inflation targets. By adjusting this parameter, FREN can fine-tune the token issuance process and maintain a controlled inflation rate.

Similarly, the average staking days and average staking amounts parameters play a crucial role in managing staking rewards and overall token supply. These parameters enable FREN to dynamically adjust the APR for staking rewards based on the length of time and the amount of tokens staked. This approach promotes a more balanced and sustainable staking ecosystem, where stakers are rewarded based on their commitment and contribution.

By incorporating these new contract parameters, FREN achieves greater flexibility in adjusting staking rewards and managing the overall inflation rate. This ensures that the protocol remains adaptable and responsive to market conditions while maintaining a sustainable growth trajectory.

$$StakeAPR = START_{APY} - timeDecrease - stakeRatio$$

## Multi-Chain Model

The cross-chain model of FREN is highly innovative, utilizing a layered asset cross-chain approach. FREN generates new token issuance on the main chain while strictly controlling the inflation rate to maintain a robust value system. Additionally, FREN dynamically allocates quotas to different sub-chains and leverages the rollup model for cross-chain liquidity, ensuring that the combined liquidity of the sub-chains equals the issuance on the main chain.

This approach showcases FREN's strong decentralization capabilities while facilitating seamless integration with various decentralized finance (DeFi) applications on different chains. By combining the benefits of decentralization with interoperability, FREN provides a wider user base and enhanced liquidity.

The layered asset cross-chain model employed by FREN enables the expansion of its ecosystem across multiple chains. It allows for the efficient transfer and utilization of assets while maintaining the integrity and security of the underlying value system. This interoperability not only facilitates the seamless movement of tokens but also encourages collaboration and innovation within the broader DeFi ecosystem.

## Token Reservation Mechanism

Amount	Usage
300B	Airdrop
100B	Liquidity
200B	Community Development
200B	Marketing

## Final

FREN is a groundbreaking crypto protocol that combines innovative features to create a fair and inclusive ecosystem. With its unique time-based value support and cross-chain capabilities, FREN aims to redefine the landscape of decentralized finance (DeFi).

Through the introduction of the time banking system, FREN establishes a novel approach to value support, protecting the interests of early investors while ensuring a linear increase in the cost of newly minted tokens over time. By strictly controlling the inflation rate and implementing dynamic APR based on various parameters, FREN maintains a sustainable and balanced token supply.

Furthermore, FREN's cross-chain model introduces a layered approach that enables seamless interoperability across different blockchain networks. By dynamically allocating quotas, utilizing the rollup model, and integrating with diverse DeFi applications, FREN maximizes decentralization while enhancing user engagement and liquidity.

As FREN continues to innovate and optimize its protocols, it remains committed to creating a fair, inclusive, and decentralized ecosystem. With its mission to empower users and foster a vibrant financial future, FREN stands at the forefront of the crypto industry, driving innovation and contributing to the advancement of decentralized finance.